

Fig. 1

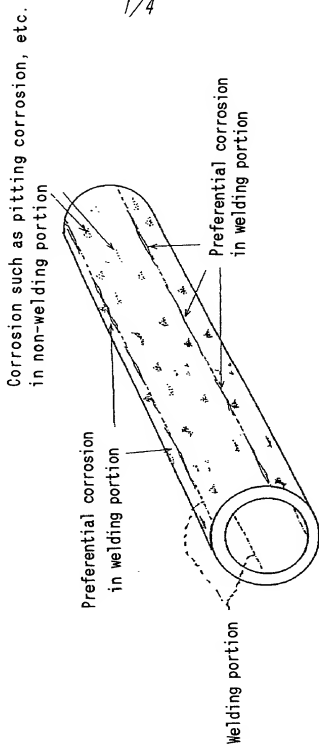


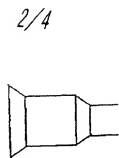
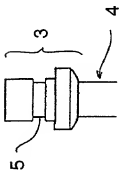
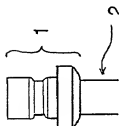
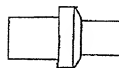
Fig. 2 (A) Fig. 2 (B) Fig. 2 (C) Fig. 2 (D)

Type A

Type B

Type C

Type D



Punch shaping

Punch shaping

Punch → forming
by rolling

Punch shaping

Fig. 3 (A)

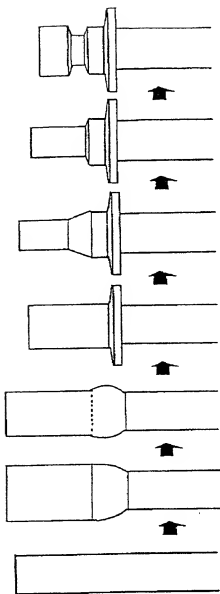


Fig. 3 (B)

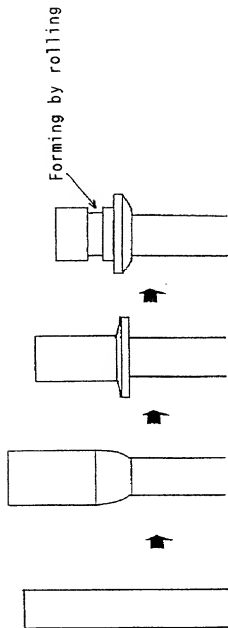
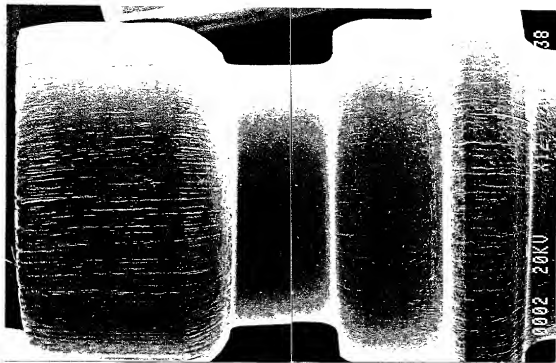
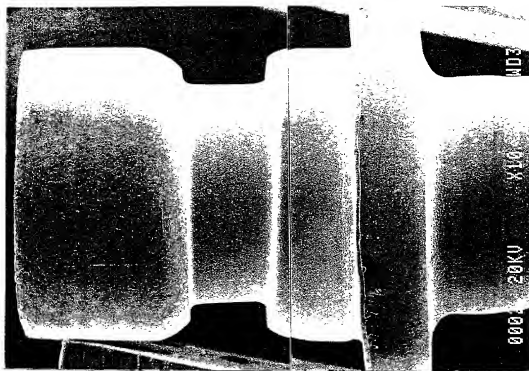


Fig. 4 (A)



Current pipe material

Fig. 4 (B)



Pipe material of example of the present invention (portion with terminal end processing of type B)